AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1.   (Currently Amended) A method of executing area-division and compression of a document image, comprising:

sectionalizing said document image on the basis of attributes associated with a compression mode to form a plurality of image areas each having an attribute associated with the compression mode;

determining whether said image areas partly or fully overlap with one another to form an overlap area;

separating said overlap area from said ~~overlapping~~ image areas that overlap each other if said overlap area has been formed, and ~~newly~~ setting an attribute associated with the compression mode for said overlap area according to an inclusive relationship between said image areas that overlap each other when all of said overlap area between two of the image areas is included within a third image area and newly setting an attribute associated with the compression mode for said overlap area according to priorities of the respective attributes of said ~~overlapping~~ image areas that overlap each other, and the positional relationship between said overlap area and each of said ~~overlapping~~ image areas that overlap each other ~~areas~~ when all of said overlap area between two image areas is not included within another image area; and

compressing each of said image areas and said overlap area using a compression technique corresponding to the attribute of said respective area.

2.   (Cancelled)

3.   (Currently Amended) The method according to claim 1, wherein in said separating step, the attribute for said overlap area is set according to an occupancy rate of said overlap area to each of said ~~overlapping~~ image areas that overlap each other, and weighting coefficients of the respective attributes of said ~~overlapping~~ image areas that overlap each other.

4.   (Currently Amended) A method of executing area-division and compression of a document image, comprising:

        sectionalizing said document image on the basis of attributes of said image document to form a plurality of image areas each having an attribute;

        determining presence of overlapping among said sectionalized image areas;

        extracting overlapping image areas determined in said determining step, and ~~newly~~ setting an attribute for each of said extracted overlapping image areas according to an inclusive relationship between said image areas that overlap each other when all of the extracted overlapping image area between two of the image areas is included within a third image, and newly setting an attribute for said extracted overlapping image area according to the respective attributes of said

image areas that overlap each other when all of said extracted overlapping image area between two image areas is not included within another image area; and

compressing each of said image areas of said document image using a compression technique corresponding to the attribute of said area obtained in said sectionalizing step or extracting step.

5.   (Cancelled)

6.   (Currently Amended) The method according to claim 4, wherein in said extracting step, the attribute for said extracted area is set according to an occupancy rate of said extracted area to each of said ~~overlapping~~ image areas that overlap each other, and weighting coefficients of the respective attributes of said ~~overlapping~~ that overlap each other image areas.

7.   (Currently Amended) A computer system for executing area-division and compression of a document image, comprising:

a first section which sectionalizes said document image on the basis of attributes associated with a compression mode to form a plurality of image areas each having an attribute associated with the compression mode;

a second section which determines whether said image areas partly or fully overlap with one another to form an overlap area;

a third section which separates said overlap area from said ~~overlapping~~ image areas that overlap each other if said overlap area has been formed, and ~~newly~~ sets an attribute associated with the compression mode for said overlap area

according to an inclusive relationship between said image areas that overlap each other when all of said overlap area between two of the image areas is included within a third image area, and newly setting an attribute associated with the compression mode for said overlap area according to priorities of the respective attributes of said ~~overlapping~~ image areas that overlap each other, and the positional relationship between said overlap area and each of said ~~overlapping~~ image areas that overlap each other when all of said overlap area between two image areas is not included within another image area; and

a fourth section which compresses each of said image areas and said overlap area using a compression technique corresponding to the attribute of said respective area.

8.   (Cancelled)

9.   (Currently Amended) The computer system according to claim 7, said third section sets the attribute for said overlap area according to an occupancy rate of said overlap area to each of said ~~overlapping~~ image areas that overlap each other, and weighting coefficients of the respective attributes of said ~~overlapping~~ image areas that overlap each other.

10.   (Currently Amended) A computer system for executing area-division and compression of a document image, comprising:

a first section which sectionalizes said document image on the basis of attributes of said image document to form a plurality of image areas each having an attribute;

a second section which determines presence of overlapping among said sectionalized image areas;

a third section which extracts overlapping image areas determined by said second section, and ~~newly~~ sets an attribute for each of <u>said</u> extracted <u>overlapping</u> image areas <u>according to an inclusive relationship between said image areas that overlap each other when all of the extracted overlapping image area between two of the image areas is included within a third image area, and newly setting an attribute for said extracted overlapping image area according to the respective attributes of said image areas that overlap each other when all of said extracted overlapping image area between two image areas is not included within another image area</u>; and

a fourth section which compresses each of said image areas of said document image using a compression technique corresponding to the attribute of said area obtained by said first section or said third section.

11.   (Cancelled)

12.   (Currently Amended) The computer system according to claim 10, wherein said third section sets the attribute for said extracted area according to an occupancy rate of said extracted area to each of said ~~overlapping~~ image areas <u>that</u>

overlap each other, and weighting coefficients of the respective attributes of said

~~overlapping~~ that overlap each other image areas.